

MEMORANDUM

To:	Valmichael Leos and Anne Foster U.S. Environmental Protection Agency	Date:	February 21, 2014
From:	John Laplante, John Verduin, Wendell Mears, and David Keith, Anchor QEA, LLC	Project:	090557-01
Cc:	Gary Miller, USEPA Philip Slowiak, IP David Moreira, MIMC		
Re:	Post-TCRA Quarterly Inspection Report – January 2014 Inspection		

Introduction

This document reports the results of the January 2014 quarterly inspection of the armored cap cover, fencing, and signage installed for the Time Critical Removal Action (TCRA) at the San Jacinto River Waste Pits Superfund Site (TCRA Site). Figure 1 shows the location of the TCRA Site.

Background

The TCRA was implemented by International Paper Company (IP) and McGinnes Industrial Maintenance Corporation (MIMC) under an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) – Docket No. 06-12-10, effective May 17, 2010. IP and MIMC are referred to together herein as the “Respondents”. A full description of the TCRA implementation is provided in the associated project documentation:

- Removal Action Work Plan (RAWP; Anchor QEA 2010, 2011)
- Revised Draft Final Removal Action Completion Report¹ (RACR; Anchor QEA 2012)

¹ David Keith, the Respondents’ Project Coordinator, received a RACR (in the form it was issued by USEPA) from Valmichael Leos via email on August 15, 2012; the appendices to the RACR were not provided to Dr. Keith as part of the document, and are assumed to remain unchanged from the appendices that had been provided by Respondents to USEPA. Respondents reserve all rights related to the changes made by USEPA to the Revised Draft Final RACR, submitted by Respondents to USEPA on March 9, 2012.

The inspection summarized in this report was conducted in accordance with the requirements and schedule established in the Operations, Monitoring, and Maintenance (OMM) Plan (Appendix N of the RACR – Anchor QEA 2012).² The OMM Plan specifies the timing, items, tolerances, and procedures for inspection, maintenance, and repair of the armored cap cover, fencing, and signage installed for the TCRA Site.

Monitoring

The following sections document the January 2014 quarterly inspection of the armored cap cover, fencing, and signage installed as part of the TCRA, as well as corrective actions taken (if any), following the inspection. The inspection process began on January 17, 2014, and was completed on February 17, 2014. The inspection included evaluation of the TCRA elements referenced below:

- Visual inspection of the security fence and signage surrounding the TCRA Site.
- Visual inspection of the armored cap located above the water surface.
- Visual confirmation that waste materials are not eroding into the San Jacinto River.
- Hydrographic and topographic survey data collection of the armored cap to compare the current elevations with the survey performed during the October 2013 quarterly inspection.

Visual Inspection

The visual inspection included observing the current conditions of the perimeter fence, warning signs, and the portion of the armored cap visible above the San Jacinto River water line. Figure 2 displays the location of the perimeter fence and the stand-alone signs around the armored cap (additional signs are affixed directly to the perimeter fence). The visual inspections were performed on January 17, 2014, and again on January 27, 2014, when armored cap enhancement work (Anchor QEA 2014) was taking place. Representative photographs of conditions observed during the visual inspection are provided in Appendix A. A summary of each facet of the visual inspection is provided in the following sections.

² The OMM Plan was attached to the Draft Final RACR, submitted to USEPA on November 22, 2011, and authorization to implement the OMM Plan was contained in an email from USEPA dated January 18, 2012. The OMM Plan was also attached as an appendix to the Revised Draft Final RACR submitted to USEPA on March 9, 2012, which USEPA then revised and issued without reference to any changes to the appendices.

Armored Cap

All portions of the armored cap that were visible during the inspection were observed to be intact, with no breaches or other damage. No movement or erosion of TCRA materials into the San Jacinto River was observed at any location during the visual inspection. The woody stem vegetation was dead and decaying due to continued maintenance (Anchor QEA 2013) and extreme temperatures during the winter. Photographs of the armored cap from the inspection are provided in Appendix A.

Perimeter Fencing

The perimeter fencing (Figure 2) on the west and east banks of the San Jacinto River was visually inspected for breaches or other evidence of damage on January 17 and 27, 2014. No breaches or other signs of fence damage were observed during this inspection for any of the three sections of the fence: the east bank, the west bank on the north side of I-10, or the west bank on the south side of I-10.

The portion of the fence installed along the south boundary of the San Jacinto River Fleet (SJRF) property is not included in the fencing inspection. The SJRF property is currently an active facility that conducts daily security checks, as required by the U.S. Coast Guard and Transportation Security Administration for an active maritime fleeting area.

Signage

A total of fifteen “Danger” and “No Trespassing” signs are located around the perimeter of the land portion of the TCRA Site; the signs are mounted on steel posts and set in concrete pads. As shown in the photographs in Appendix A, these signs were observed to be in place during the January 17 and 27, 2014 inspections.

Three USEPA Public Notice Signs are present around the TCRA Site located: 1) near the gate entry point for the perimeter fence north of I-10; 2) near a gate entry point south of I-10; and 3) at the end of the TxDOT right-of-way north of I-10 near the San Jacinto River. These three signs were observed to be in place and undamaged. See Appendix A for representative photographs.

Table 1 summarizes the condition of the TCRA Site signage described in this section.

Table 1
TCRA Perimeter Fencing and Sign Inspection Punch List

Task	Status	
	Completed	Date
Perimeter Fence Visually inspect the perimeter fencing on the east and west sides of the San Jacinto River.	Yes	01/17/2014 01/27/2014
“Danger” and “No Trespassing” Signs Visually inspect the 15 signs to verify that they remain in place.	Yes	01/17/2014 01/27/2014
USEPA Public Notice Signs Visually inspect the 3 signs to verify that they remain in place.	Yes	01/17/2014 01/27/2014

Surveys

Portions of the armored cap above the water surface or at a water depth too shallow to access by boat were surveyed using land-based topographic survey techniques. A bathymetric survey was performed for the portions of the armored cap below the water surface and accessible by boat. The surveyor followed the track line spacing, measurement intervals, and accuracy requirements detailed in the OMM Plan.

Survey Tolerance Requirements

The OMM Plan requires that each survey be compared with the prior completed survey using the following criteria:

1. Areas with elevations that are within 6 inches of the previous survey require no action.
2. Contiguous areas with elevation changes exceeding plus or minus 6 inches triggers a review of the survey benchmarks for accuracy or movement.
3. Areas where surveyed elevations are 6 inches higher or lower than the prior survey for a contiguous area larger than 30 feet by 30 feet will require probing to measure the cap thickness.

Survey Results

The survey for this quarterly inspection event was conducted by Hydrographic Consultants, Ltd. Upland topographic data was collected before and after the TCRA armored cap enhancement activities began on January 17, 2014, and were completed on January 27, 2014 (Anchor QEA 2014). A complete topographic survey started on January 27, 2014.

Completing the topographic survey was delayed by extreme cold weather, rain, ice, and lightning storms at the Site. The hydrographic surveys were conducted intermittently between February 13 and 17, 2014. Some areas of the eastern cell could not be accessed by boat or safely by wading during the inspection period. The processed survey data was received and approved on February 19, 2014. The survey work occurred over several days because seasonal and extreme frontal systems passing through the area hampered the survey efforts. Visual inspections of the un-surveyed area did not indicate any movement or scour of previous sediment deposition and organic growth in this area. Figure 3 displays the results of the completed survey.

The survey data from October 2013 and January 2014 were compared to evaluate the differences in the top of the armor cap elevation between surveys. These differences are shaded and shown on Figure 3. The survey results show increased elevation in the enhancement areas and indicate continued sedimentation/deposition on the surface of the armored cap. The area colored in gray could not be access during multiple attempts due to continued northerly frontal systems causing very low water conditions and organic growth not allowing a safe wading survey.

Manual probing of armored cap thickness is required at areas identified by the topographic or bathymetric surveys as more than 6 inches lower in elevation than during the prior survey over contiguous areas of 30 feet by 30 feet. When the January 2014 survey was compared to the October 2013 survey, the results indicated that there were no areas that met the manual probing requirement. Therefore, no probing was conducted as part of the January 2014 inspection.

The small areas identified as increases and decreases in elevation, outside of the enhancement areas, can be attributed to the horizontal and vertical accuracy of the survey, minor shifts in track line location from the baseline survey, elevation data recorded in the crevices between rock surfaces, or other related measuring inaccuracies. The potential for

these inaccuracies to exist was confirmed by the surveyor after reviewing the data collected during this inspection versus the surveys taken in October 2013.

Repairs to TCRA Construction Elements

No TCRA construction elements were identified as deficient or damaged during this inspection event. No maintenance was required to the TCRA cap in response to the January 2014 inspection.

Inspection Summary

There were no damages or deficiencies identified by the visual, topographic or bathymetric surveys.

List of Figures

Figure 1 - Vicinity Map

Figure 2 – Fence and Warning Sign Layout

Figure 3 – January 2014 Quarterly Inspection Survey

List of Appendices

Appendix A – Inspection Photographic Log

References

Anchor QEA, LLC (Anchor QEA), 2010. *Removal Action Work Plan*, San Jacinto River Waste Pits Superfund Site. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. November 2010.

Anchor QEA, 2011. *Draft Final Removal Action Work Plan*, San Jacinto River Waste Pits Superfund Site. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. Revised February 2011.

Anchor QEA, 2012. *Revised Draft Final Removal Action Completion Report*, San Jacinto River Waste Pits Superfund Site. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency (USEPA) Region 6. Revised March 2012.

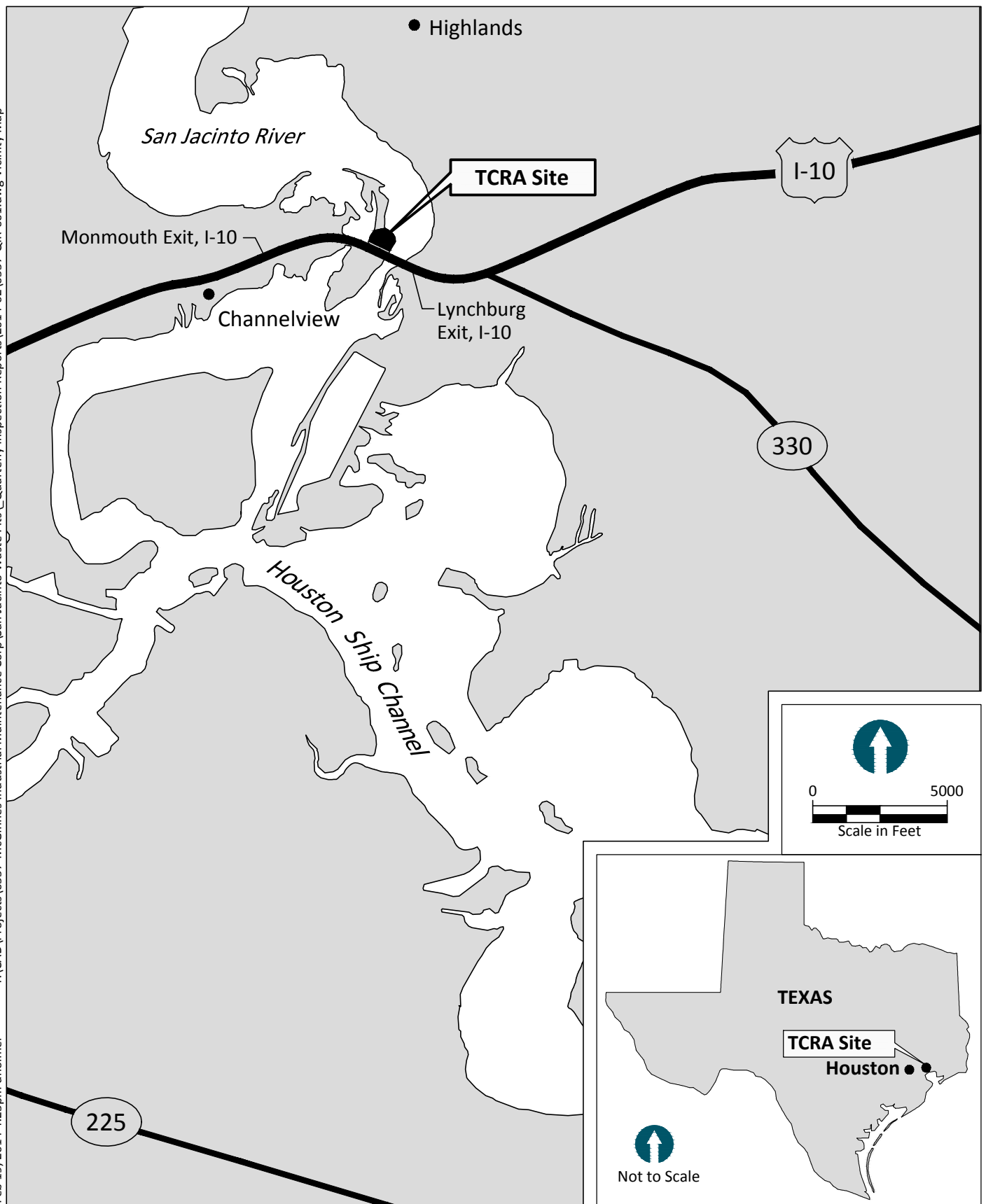
Anchor QEA, 2013. Letter from David Keith, Anchor QEA on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. Subject: Vegetation Control and Herbicide Application(s) on the Time Critical Removal Action Armored Cap, San Jacinto River Waste Pits Superfund Site, Channelview, Texas, dated July 12, 2013.

Anchor QEA, 2014. San Jacinto River Waste Pits TCRA Armored Cap Enhancement Construction Completion Report. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. February 2014.

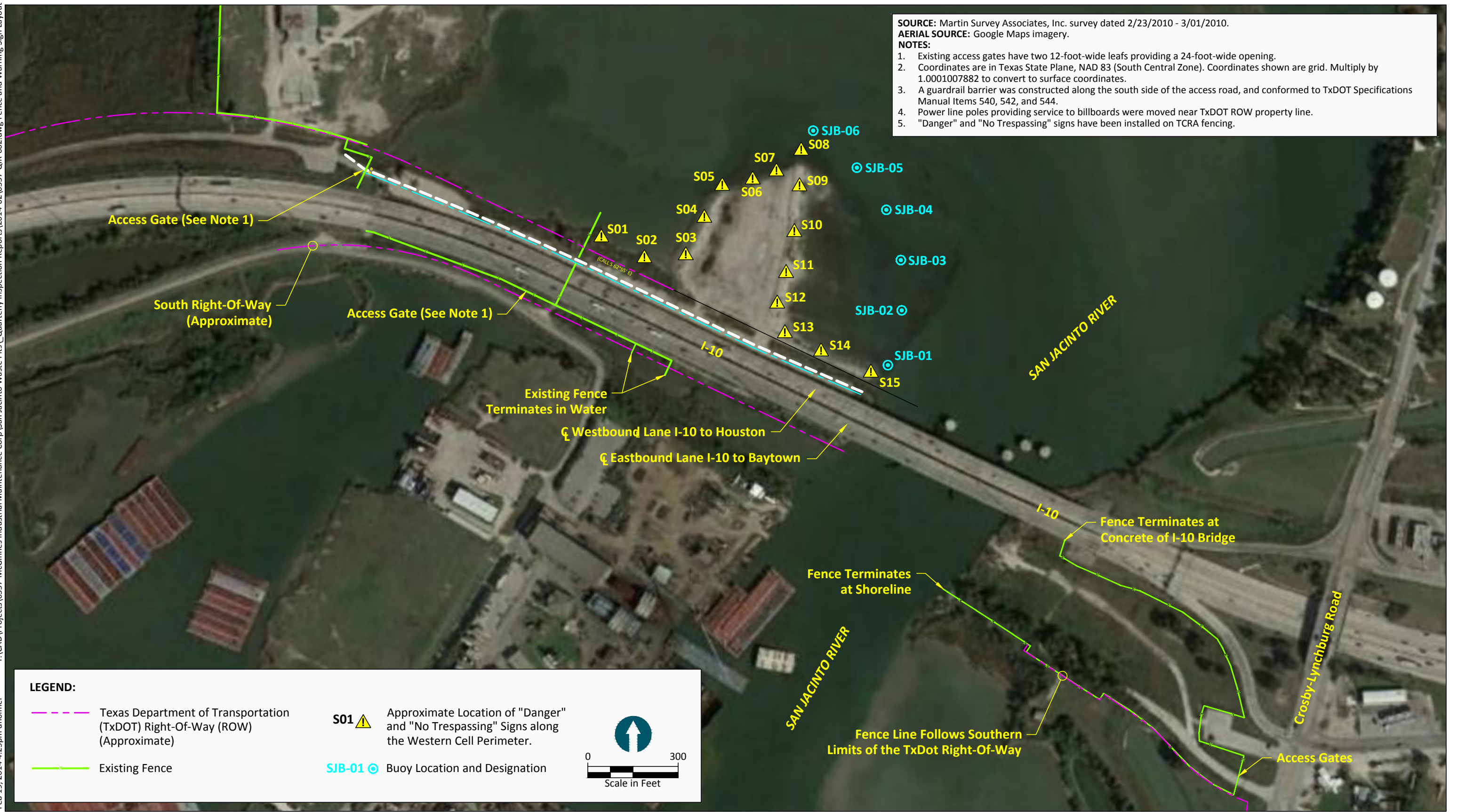
USEPA, 2010. *Administrative Settlement Agreement and Order on Consent for Removal Action*. U.S. Environmental Protection Agency Region 6 CERCLA Docket No. 06-12-10. In the matter of: San Jacinto River Waste Pits Superfund Site Pasadena, Harris County, Texas. International Paper Company & McGinnes Industrial Management Corporation, Respondents.

FIGURES

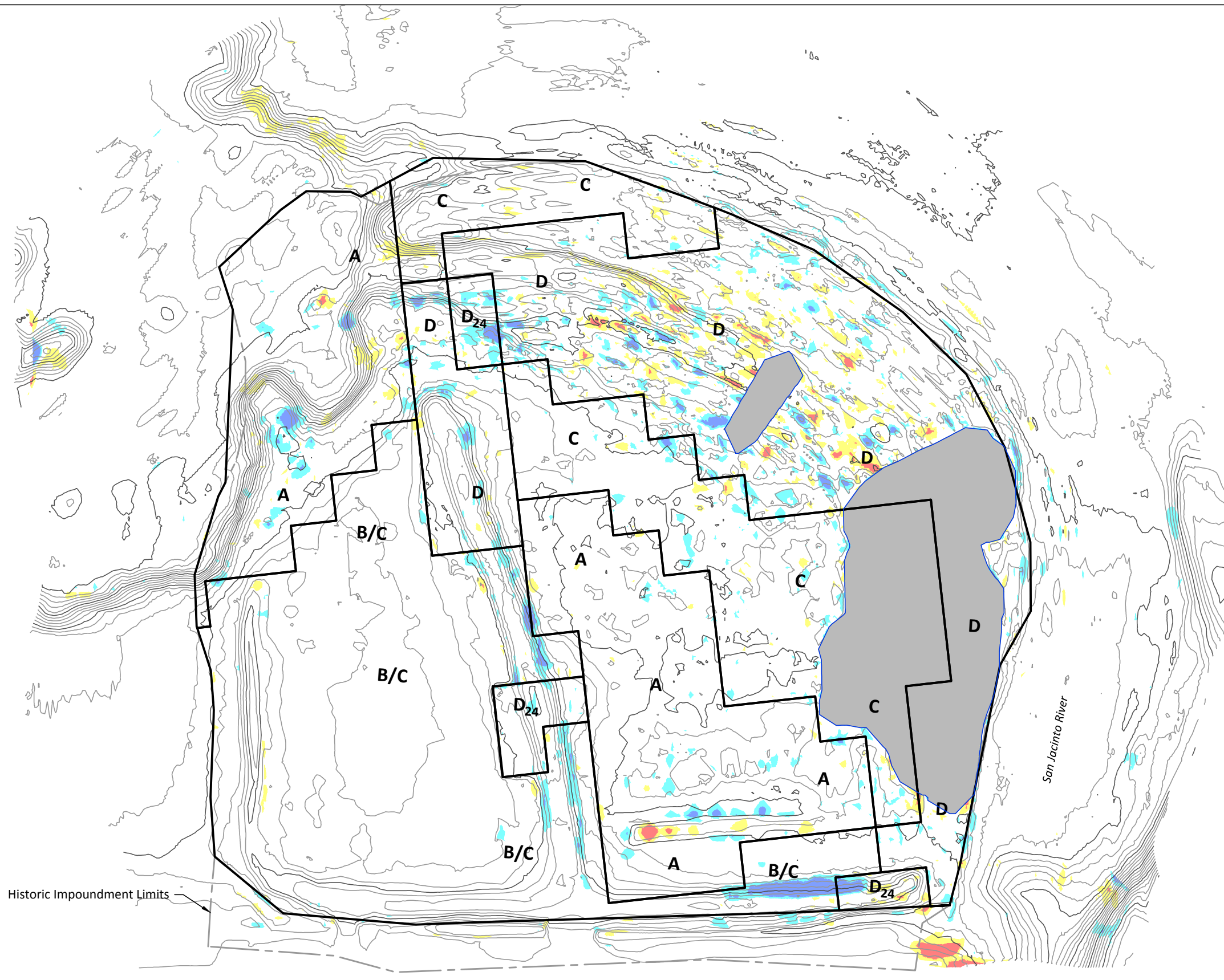
T:\CAD\Projects\0557-McGinnes Industrial Maintenance Corp\San Jacinto Waste Pits\Quarterly Inspection Reports\2014-02\0557-QJR-001.dwg Vicinity Map
Feb 19, 2014 4:25pm dholmer



T:\CAD\Projects\0557-McGinnes Industrial Maintenance Corp\San Jacinto Waste Pits\Quarterly Inspection Reports\2014-02\0557-QIR-002.dwg Fence and Warning Sign Layout
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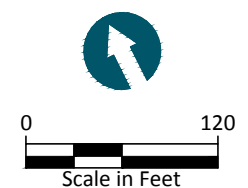
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LEGEND:

- February 2014 Bathymetric and Topographic Contours (1 Foot Interval)
- Armored Cap Type and Boundary
- Historic Impoundment Limits
- > 1.0 Foot Increase
- 0.5 Foot Increase to 1.0 Foot Increase
- 0.5 Foot Increase to 0.5 Foot Decrease
- 0.5 Foot Decrease to 1.0 Foot Decrease
- > 1.0 Foot Decrease
- Visual Survey Only
- Example 30'x30' Area

SOURCE: Drawing prepared from surveys provided by Hydrographic Consultants dated October 2013 and February 2014.
HORIZONTAL DATUM: Texas State Plane South Central, NAD83, U.S. Feet.
VERTICAL DATUM: NAVD 88.



APPENDIX A

INSPECTION PHOTOGRAPHIC LOG



Photograph 01: USEPA public notice sign located north of I-10 along southern berm (view southwest)



Photograph 02: Warning sign and enhanced southern berm (view southwest)



Photograph 03: Warning sign and dead vegetation along southern berm (view south)



Photograph 04: Enhanced central berm and intertidal area (view north)



Photograph 05: Warning sign along enhanced central berm (view northwest)



Photograph 06: Central berm and Western Cell (view south)



Photograph 07: Warning signs and vegetation along the northern edge of Western Cell (view southwest)



Photograph 08: Western Cell (view south)



Photograph 09: Perimeter fencing and vegetation on the west bank south of I-10 and east of the USEPA public notice sign (view northeast)



Photograph 10: USEPA public notice sign and vegetation on the west bank south of I-10 (view north)



Photograph 11: Fish consumption advisory signs on the west bank south of I-10 (view south)



Photograph 12: Signage and perimeter fencing on the west bank south of I-10 (view northwest)



Photograph 13: Daisy chain and warning signage on access gate to east bank south of I-10 (view west)



Photograph 14: Small opening below perimeter fencing on east bank south of I-10 (view north)



Photograph 15: Perimeter fencing on east bank adjacent to and south of I-10 (view northeast)



Photograph 16: Skid steers leaving site after TCRA enhancement construction (view west)